A Snapshot of Head and Neck Cancers

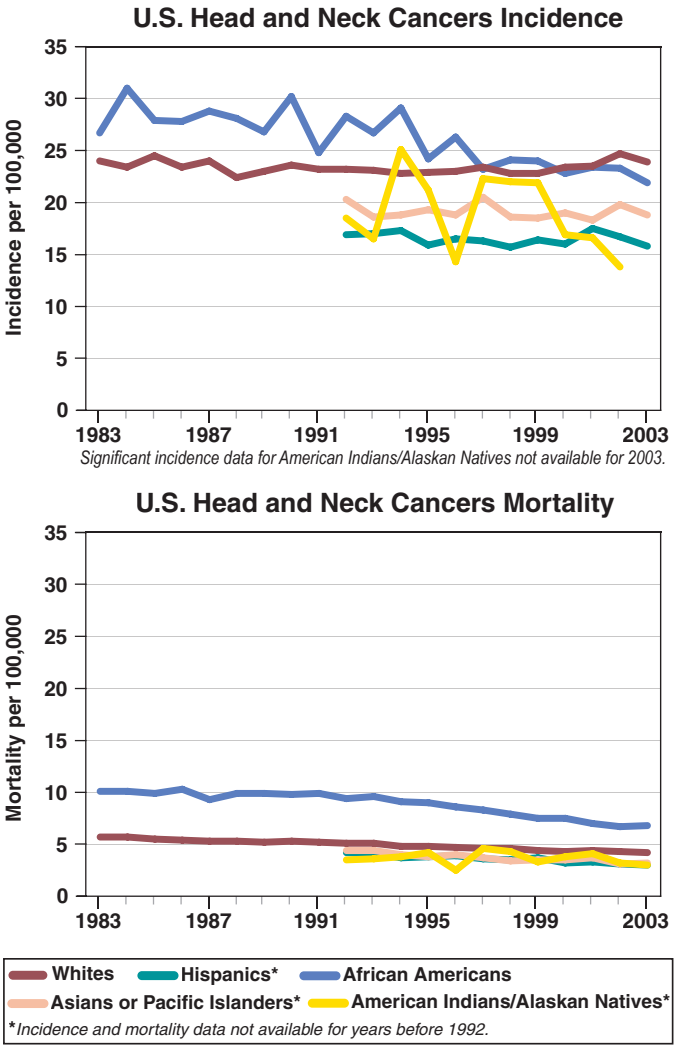
Incidence and Mortality Rate Trends

Cancers of the head and neck, which include cancers of the larynx, nasal passages/nose, oral cavity, pharynx, salivary glands, and thyroid, account for 3 percent of all malignancies in the United States. Until recently, African Americans have had the highest incidence and mortality rates of head and neck cancers compared to other racial and ethnic groups. Whites currently have the highest incidence rates of head and neck cancers, although mortality is still highest in African Americans.

It is estimated that approximately $ 3.2 billion[1] is spent in the United States each year on treatment of head and neck cancers.

Source for incidence data: Surveillance, Epidemiology, and End Results (SEER) Program and the National Center for Health Statistics. Additional statistics and charts are available at http://seer.cancer.gov/.

[1]In 2004 dollars, as reported in Brown ML, Riley GF, Schussler N, and Etzioni RD. Estimating health care costs related to cancer treatment from SEER-Medicare data. Medical Care 2002 Aug; 40 (8 Suppl): IV-104–17.



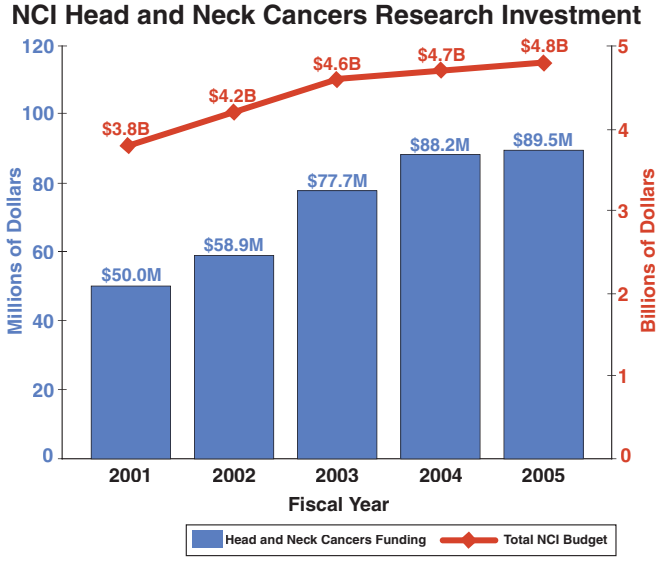
Trends in NCI Funding for Head and Neck Cancers[2] Research

The National Cancer Institute's (NCI's) investment[3] in head and neck cancers research has increased from $50.0 million in fiscal year 2001 to an estimated $89.5 million in fiscal year 2005.

Source: NCI Financial Management Branch http://fmb.cancer.gov.

[2]Includes cancers of the buccal cavity, esophagus, head and neck subset, larynx, parathyroid, pharynx, salivary glands, and thyroid.

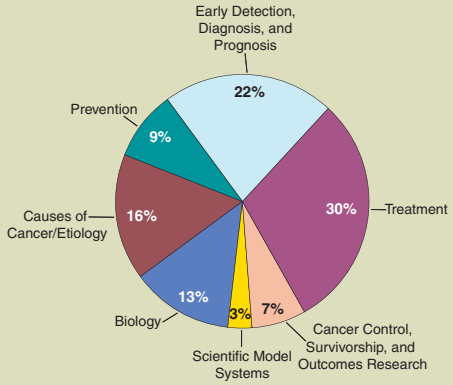
[3]The estimated NCI investment is based on funding associated with a broad range of peer-reviewed scientific activities. For additional information on research priorities and funding, see http://www.nih.gov/about/researchpriorities.htm#overview.



Examples of NCI Research Initiatives Relevant to Head and Neck Cancers

- Four **Specialized Programs of Research Excellence (SPOREs)** in head and neck cancers support translational research on cancers of the upper aerodigestive tract and on thyroid cancer. SPORE researchers are addressing markers of genetic susceptibility of head and neck cancers and novel therapies for treatment and prevention. http://spores.nci.nih.gov/current/hn/hn.html
- The NCI and the National Center for Complementary and Alternative Medicine (NCCAM) are cosponsoring a **Specialized Cancer Research Center Grant** to examine mechanisms of action, safety, and clinical efficacy of hyperbaric oxygen therapy for the treatment of head and neck tumors. http://www.nih.gov/news/pr/oct2000/nccam-05.htm
- The **Cancer Trials Support Unit (CTSU)** supports a national network of physicians and patients participating in Phase 3 clinical trials to treat several adult cancers, including those of the head and neck. http://www.ctsu.org/
- NCI supports research on the **Application of Emerging Technologies for the Analysis of Cancer**, which includes molecular profiles of head and neck cancers. http://grants.nih.gov/grants/guide/rfa-files/RFA-CA-07-017.html
- The **Nasopharyngeal Family Study** is attempting to elucidate genetic and environmental factors linked to the development of nasopharyngeal cancer. The study, which is being conducted in Taiwan, includes about 250 families with two or more members affected by nasopharyngeal cancer. http://dceg.cancer.gov/hreb/nasopharyngeal-cancer.html
- Information on treatment options for oropharyngeal cancer is available on NCI's **PDQ website**. http://www.cancer.gov/cancerinfo/pdq/treatment/oropharyngeal/HealthProfessional
- **Clinical trials** are actively recruiting patients with head and neck cancers to test new treatments. http://www.cancer.gov/search/clinicaltrials/
- The **Head and Neck Cancers Home Page** provides up-to-date information on head and neck cancers treatment, prevention, genetics, causes, screening, testing, and other topics. http://www.cancer.gov/cancertopics/types/head-and-neck//

NCI Head and Neck Cancers Research Portfolio



Percentage of Total Dollars by Scientific Area
Fiscal Year 2005

Data on training grants are not included in this figure. A description of the relevant research projects can be found at the NCI Cancer Research Portfolio website at http://researchportfolio.cancer.gov.
Includes data from the following RAEB categories: Buccal Cavity, Esophagus, Head & Neck (Sub), Larynx, Parathyroid, Pharynx, Salivary Glans, and Thyroid.

Selected Opportunities for Advancement of Head and Neck Cancers Research

- Develop biomarkers to determine the risk of head and neck disease progression and to predict the response to therapy.
- Determine the most appropriate radiation therapy regimen for head and neck cancers.
- Identify biomarkers for the early detection of head and neck cancers.